## ABSTRACT OF THE DISCLOSURE

A sensing apparatus having a fluxgate and a control method capable of reducing current applied to drive the fluxgate are disclosed, the sensing apparatus including a driving coil for exciting a magnetic substance core with current, a current amplifier for applying the current to first and second ends of the driving coil, a fluxgate having a pulse generator for generating a pulse to turn on/off the current amplifier, an A/D converter for converting an analog signal from the fluxgate into a digital signal, and a pulse controller for outputting a control signal allowing the pulse to be applied to the current amplifier until it is determined that the conversion of the analog signal into the digital signal by the A/D converter is completed.